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INTRODUCTORY LECTURES
OF
THE COURSE
TO THE
PREPARATORY MEDICAL CLASS,
COLUMBIA, S. C.
BY
DRS. GASTON & TALLEY.

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ADDRESS OF J. M^CF. GASTON, M. D.

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The plant has its germ, the lowest class of animated beings have their larvæ, while a higher development of the series is propagated from the ovum; and ascending in the scale, the embryo shows the outline of the future animal. So it is, that there is a starting point in all created things; and as this is usually small in comparison to the anticipated result, we are prepared by analogy, to expect better things from the beginning, which is now made in a new enterprise. It is not in the order of nature, nor is it consonant with reason, to enter full grown upon an undertaking such as we now inaugurate: and we rely upon the subsequent course of events to sustain our efforts to elevate the standard of preparatory training for the Medical profession. We have set about the work of building up a rampart for the protection of science, looking with confidence for the coöperation of our fellow-physicians throughout the State, and for the support of young men, who may find it practicable to spend a few months here, in receiving such instruction as we may be able to afford to them. With office students, who demand something more at our hands than the ordinary routine of being drilled in the art of making pills, and dressing wounds, it has been impressed upon us to present, in a systematic form, such suggestions in reference to the different subjects treated of in the text books, as will enable them to comprehend the points presented. We have determined to do more for the advancement of our students in knowledge, than has been usual in the course of office instruction; and if those, whose province it is to reap the benefits of our efforts, manifest that appreciation of this course, which is satisfactory to us, it will be attended with a reciprocal influence in promoting our object. Demand creates

supply, and supply creates demand in the matter of knowledge, as regards instructor and pupil. If the teacher finds a mind seeking information, it serves as a stimulus to him in giving it; and again, if the pupil discovers a zealous desire on the part of the instructor to contribute to his advancement, it enhances the interest he feels in receiving knowledge. So that the relation of instructor and pupil is that of a mutual responsibility; and while we engage to devote that time and attention to the subjects before us, which will be requisite for indoctrinating those who give their attention, we must ask and expect a confiding zeal on their part in improving the opportunity which is afforded to them. Not only is punctuality in attendance demanded, but a whole-souled devotion to the calling of the physician, and an ardent appreciation of all the facts and details, which are furnished as the weapons by which disease is to be attacked. If we can inspire such a feeling on the part of our students, there need be no misgivings as to our ultimate success in carrying out this enterprise for elevating the standard of preparation. That we have difficulties to contend with at the outset, from the very fact of the field being untried, is an incidental feature of all new movements, and we are prepared to meet the issue with a calm reliance upon the merits of our cause. We know full well, that we have not the prestige of successful operation, and we know full well that a failure will be prejudicial to our prospects. But once to triumph, is to make victory easy afterwards; and being strongly and earnestly impressed with the noble maxim, that whatever man has done, man may do, we have essayed to enter the arena, with our armor on, pledged to devote our best energies to the accomplishment of a peaceful victory. If it goes forth to the public at the close of our term, that we have succeeded in getting a class to attend upon a course of lectures in Columbia, we will feel no apprehension but that a sufficient number will rally to our ranks in succeeding years. Success ensures success, and we may then triumphantly exclaim—Excelsior! excelsior!!

Some of the considerations which have prompted us to engage in this course of preparatory instruction, may be appropriately presented. First in the enumeration, is a profound conviction that private pupils do not receive that thorough and systematic instruction by the course usually pursued which is requisite for entering the lecture room of the Medical College with a prospect of receiving its advan-

tages. A certain amount of medical knowledge is absolutely necessary to enable the student to understand and appreciate the Professor's lectures, and the great aim and end of office instruction, is, to impart this information. But all of us know how little is accomplished usually by office students, even in the most elementary acquisition from our text books. More than one-half of the medical students of this State, perhaps, attend their first course at the Medical College, without having read over, even in a superficial way, the ordinary routine of the several departments upon which lectures are delivered. This should be otherwise; as it is preposterous for a young man to take his seat to listen to a Professor, who uses terms which he does not understand by reason of his neglect of preparatory study. We even find some attending lectures without any previous attention to the subject; and a Mathematician might as readily teach his department, by giving his pupil the letters which represent lines and angles, without a diagram, as a medical instructor communicate a knowledge of his subject, without a previous acquaintance with the terms employed in descriptions. Indeed, the relative value of office instruction and the College course, is not, by any means, properly appreciated by young men, and the more they avail themselves of the advantages of their private instructions, the better will they be qualified to receive the benefits of the Professor's lectures. The latter proceeds upon the supposition of attainments on the part of the student of a kind and degree which will fit him for comprehending what is said; and it would be inconsistent with the whole scope of the Professor to make such explanations as the private preceptor is expected to give. The different regions of the body, the divisions of tissues, the designation of parts, the names of bones and other portions of the body, are supposed to be familiar to the student when he goes to the College, and the Surgeon treats his subject accordingly. So, in like manner, the classes of Medicines, their names, qualities, &c., are pre-supposed by the Professor of practice in his lectures, and if a young man has no acquaintance previously with *Materia Medica*, he is groping, like a blind man in a room brilliantly illumined, the benefit of which he is deprived by his own state. This preliminary acquaintance with Anatomy and *Materia Medica* can only be properly gained in an office where personal access to the skeleton and drugs is admissible; and under the direction of an

immediate preceptor, as without such supervision, grave mistakes are frequently made by students in comparing the articles with the descriptions of the books. The chief object then, in this practical course, will be to supply the desideratum for the medical student, by such illustrations and details of observations, as may promote the better understanding of the text books, and thus render higher attainments practicable at the College.

The second general consideration which has actuated us to move in this matter, is, that Columbia is a point preëminently adapted for the work. The comparative exemption from malignant diseases of any kind, and from epidemics especially, renders it safe to come here from any quarter, and remain during the Spring and Summer months: and, while our city is not without attractions at any season, it presents much in the Spring of the year, which may beguile the student during those hours when free from study. The green foliage of our streets, the floral wreaths of our gardens, the bewitching cadence of our fountains, not to speak of the increasing taste of our architectural designs, conspire to invite young men to this point. We are no longer limited to the narrow resources of a town, but have assumed the character and attributes of a city, and are proud to feel and to say that our destiny is upward and onward. While our population is steadily increasing, every element of progress and refinement is developing amongst us, and the various departments of learning are liberally promoted. Under such auspices we are prompted to improve the facilities for Medical education, and while Columbia is readily accessible from every portion of the State, we trust to afford an inducement to young men in the country, to come and spend a few months here in pleasant intercourse with each other, and with us as their instructors.

In connexion with these considerations, in favor of the measure being undertaken at this time, and at this place, we may be allowed to present some more special points of our personal relation to the duties devolving upon us. That we claim to be competent for the work, is to be inferred from our engaging in it, and that we are willing to labor zealously, and ready to make sacrifices to secure the ends proposed, is what we now hope to have an opportunity of testifying. While my colleague has enjoyed all the advantages which the institutions of our own country afford, he has reaped the fruits

of a sojourn abroad, treasuring up the lessons of the distinguished teachers of London, Edinburg and Paris. With these acquisitions, he has garnered up the experience of practical application in the various departments of professional service, and is prepared at all times to show his faith by his works, of unceasing devotion to his calling. His familiarity with the records of medicine, and the readiness with which precedents are made available to his purposes in the treatment of cases, have designated him as the proper person to take charge of Therapeutics and Surgery, with such anatomical details as may be involved in practical description : while the Female department and Practice, with such Physiological specifications as may be requisite, have perhaps quite as appropriately devolved upon me. My intimate acquaintance with the diseases of the up-country, which was derived from a practice of seven years in Chester District, enables me to render useful information to those who may come from the country; and my past interest in all that pertains to female disorders, gives me some claim to recognition in this particular sphere, while the researches with which I have been occupied latterly in the domain of Physiology, makes me approach this field with a fair prospect of communicating something beyond the old routine of the different functions.

Entering now upon the fourteenth year of my professional career, during all of which I have been actively employed in the practical duties of the Physician, it may not seem unbecoming to propose to teach others somewhat of the practice which has been adopted, and while it will be my object to impart the facts and principles which are recognised by standard authorities, it will be my province to give my individual experience in the management of diseases. It may here be said, that my course in the practice of medicine, has been eclectic in the highest and most enlarged sense of that term, appropriating to my own purposes whatever was indicated by the case under treatment, from any and every source that was available. My respect for authority is only so far as it is sanctioned by judgment and observation; and I would warn every young man in the outset of his preparation for his profession, to exercise those indispensable precautions in receiving the dictates of authors, and even the suggestions of those with whom you are associated, as pupils.

As to the subject of Obstetrics, our time will not permit more than a summary of the particular points involved in the management of

such cases; but it will be my endeavor to be more explicit in reference to the special derangements of the female organization, connected with, or independent of parturition. This is a field of inquiry which has, of late years, attracted much attention; and while Simpson of Edinburg, Brown of London, and Caseau of Paris, have elucidated many points of the Medical and Surgical practice of women, it has been reserved for our country to make the most signal advances in the treatment of some of the afflictions of the female. The interest awakened by Sims in behalf of woman, led, a few years ago, to the erection of a Woman's Hospital, in New York, where he has not only treated with success, the vesico-vaginal lesions, (to which his special attention was directed,) but he has contributed to the relief of many suffering with other troubles. Following in the wake of Sims, we are gratified to note the improvements of Bozemann, in the management of this class of cases, and it must give every generous heart satisfaction to observe the very marked consideration which was extended to this American Physician, on his recent visit to Europe. Much has been accomplished in alleviating the sufferings of woman, but a vast deal remains to be done in this interesting department, and I hope to contribute in some degree to this reform.

The importance of this department cannot be too strongly impressed upon the minds of those who look forward to the field of general practice. In the relation which the physician bears to the family, he is expected to be in readiness to meet all the inquiries which may be made respecting female diseases, as well as to undertake the management of all the derangements to which the sex is liable. It is his duty, therefore, to be thoroughly furnished with knowledge in this particular sphere, and I would urge special attention to the chronic affections of the female organization, as a class in which therapeutic agencies have not attained to that efficiency which is to be desired, and in which the reputation of the physician is very much involved. The distinction in the physical structure of the female from that of the male, predisposes her to many special infirmities, and it is requisite to keep this element before the mind in the treatment of her ordinary ailments. Her emotional nature has more influence over her nervous system, and hence, over her nutritive and secretive processes, than in the male, which renders it important to direct our attention to the mental state of the patient, and to avoid

all outward sources of annoyance, while we combat the internal workings of disease. The girl, the young lady, the wife and the mother, may each present separate points for consideration, and to be able to afford relief, these things should receive early attention from the student.

In connection with these practical branches, it will devolve upon me to direct attention to the department of Physiology, so far as conducive to a proper understanding of the normal capacities of the organization, and thus to be enabled to detect the departures from the standard of healthy action. It is not my purpose to go over the elementary points involved in the performance of the various animal functions, but rather, to enter into the causation of these several developments, and thus afford a comprehensive view of the sources of power in the organism.

General laws govern the actions of the various portions of the human body, and if we can arrive at an adequate conception of the influence which is propagated thus to the several parts, sustaining and modifying their particular functions, we will have a key to the entire organization. As the law of gravitation serves to explain the relation of the different orbs of the Universe, and their revolutions on their own axes, and around each other, so a thorough comprehension of the great fundamental principles of the physical structure will enable us to elucidate the relative action of different organs which constitute the whole organic arrangement of the human system. To know that the body consists of bones, muscles, nerves, blood-vessels, cellular tissue, &c., associated for definite purposes, does not afford an insight as to the mode in which those results are produced, and it is important that the process should be understood, while it is of paramount consequence to know the cause of action.

A rigid deduction from facts, confirmed by observation, affords a safe guide in our investigations, and whatever hypothesis, theory, or principle has been submitted to this test, may be applied in practice. Experience furnishes the corrective of all erroneous systems, and however the prejudiced mind may be deceived in coming to conclusions, the results of experiment must elicit truth to the candid inquirer. Attention and judgment, with an honest purpose, are requisite in the comparison of what is established, with that which is deduced from our personal experience, and no preconceived views should mould

our reflections upon the data by which a doctrine is maintained or supported. With such convictions, I have entered upon the work of examination in the obscure department of man's organization, and have endeavored to search out the capacities and susceptibilities in health and disease, with such indications of the varying conditions, as would lead to a more satisfactory recognition of the state of the physical powers under different influences.

The body of man is modified by the impressions of the emotional and intellectual element of his constitution, so as to render his organism far more complex and interesting than that of other animals, and yet there is enough in common with them to elicit our most profound consideration. It is not simply a combination of parts under the influence of the ordinary relations of the physical world, but there is a mysterious element of life associated with the elements of the body, which qualifies and enhances every function. While it is no part of my plan to attempt any elucidation of the connection of mind and matter or soul and body, it devolves upon me to note some of the changes which result from this relation constituting the physico-vital phenomena of the organization of man. In my use of words there is no reference to the dogmatism of former days; but with the sole view of expressing simply, the thing intended, it will be my object to use terms which will be readily comprehended, and avail myself of technicalities only when they are essential to convey a correct idea of the subject.

The study of medicine will be promoted by knowing the names by which different elements are distinguished, and it is therefore proper for the student to have a knowledge of the nomenclature which is recognized by the profession. But it should always be kept before the mind, that the phraseology which is used in medicine is designed to indicate more clearly, and more concisely, that which, under other circumstances, would require special descriptions for each particular thing, and whenever more simple terms, than those associated with it in technical parlance, are available, we may very properly dispense with the medical nomenclature. In our intercourse with medical men, the professional garb may be assumed to whatever extent taste and inclination may dictate; but, in communicating with our patients, we should divest ourselves of it, as far as practicable, and in addressing our pupils, we will use technicals only so far as we may

consider appropriate to the several branches of medicine and surgery. We owe this to those who have placed themselves under our tuition, and without reference to the increase in the number of applicants for this special course of lectures, we will undertake to impart daily, those practical lessons to the class, which research and observation may render available to us. To indulge in discussions as to the dogmas of different schools, or the theories of various writers, will not comport with our design, nor would it subserve the purposes of those who look to us for useful additions to their medical stores. We will, therefore, eschew, as far as practicable all reference to mere hypothesis, and adopt such a course as will afford a guarantee to the student of the correctness of the principles which may be propounded in any department. Well established data, either by experiment, observation, or rigid induction, will serve as the basis of the views we propose to give, and so far as practicable they will be substantiated by facts from our personal experience.

The great variety of circumstances which serve to modify pathological indications and therapeutic results cannot be too strongly enforced upon the attention of those who are entering upon the study of medicine. Climate, habits and psychical influences, each impress the human organism in a way to change the effects of disease in different subjects, and to modify greatly the action of medicines. These prevalent influences must be taken into the account in studying the effect of disease on the subject, and in pursuing a remedial course of treatment. To apply measures to correct a morbid condition, under circumstances which predispose to the recurrence of the derangement, would, of course, be bad practice; and all such circumstances require to be considered in the management of cases. Hence the importance to the student of knowing in advance, as far as practicable, the probable effects of extraneous phenomena upon the powers of the organization, and of viewing man as subject to those modifications. It will therefore, be a part of our plan to point out the operation of such agents as Electricity, Heat and Light, while we advert more particularly to the influence of sleep, diet, air and exercise, as manifested by impressions on the animal economy.

Such being the general scope of inquiry which we purpose to enter upon in this course of practical lectures, it will be observed that the result must depend very much on the appreciation of our efforts,

by our class. As a good listener is requisite to a good talker, so an attentive hearer is essential to a successful lecturer; and though we must present much that is within itself dull and prolix, all knowledge pertaining to the business to which you have set yourselves apart, should have sufficient interest to enlist your assiduous consideration, and thus secure careful attention. It is not generally understood how much of interest in a subject, depends upon a thorough comprehension of it, and to this end attention is a prime element of the mental process. To concentrate the thoughts upon a particular topic presupposes undivided attention, and even an inferior capacity of mind, accomplishes more by this kind of devotion of its energies, than a superficial consideration of the finest intellect can effect. It will not then, be deemed inappropriate to dwell somewhat upon the characteristics of the true student of medicine, and thus inculcate a practical lesson upon those who are to receive our instructions.

In the first place, he must be profoundly impressed with the character of the duty which devolves upon the Physician, and entertain a certain degree of respect for the dignity of the profession. He must recognise the immense responsibility which rests upon the practitioner, and the necessity of preparation to meet the emergencies, involving the issues of life and death. Unless the student has before him a high standard of professional worth, he will not be prompted to those aspirations which alone can lead to excellence in his attainments, and it is well that the real basis of success in business should be sought for in the merit of the individual. It is no doubt true, that occasionally, a man may become notorious by trickery without substantial merit, but most frequently it will appear upon a close examination, that those who are most prominent in the profession are most assiduously occupied in studying medical science. Every young man who views the medical profession as worthy to be entered, should seek to elevate its standard by substantial acquirements in those branches of study which are to fit him for his duties, and no one should entertain for a moment, the thought of engaging in this pursuit as a mere trade, by which his pecuniary resources are to be increased. We may well say with Agassiz, that he cannot afford to waste his time, in making money, when it does not comport with his higher aim. If his heart cannot respond to the calls of affliction, and urge forward the hand to afford relief, he cannot discharge his

trust with that efficiency which constitutes the physician's passport to confidence. There must not only be an appreciation of the status of those who compose this class, but there must exist a regard for their duties, which renders the work acceptable to one who is preparing for it. The unremitting toil of the practitioner, and the sacrifices of personal comfort, which are exacted by the promiscuous claims upon him, by day and by night, are of the most onerous character which attaches to any service, and if the profession is not ennobled by some sentiment appealing to our higher and better part, it must present a dreary prospect to the medical student. But we congratulate ourselves with the conviction, that there are many redeeming features to lessen the drudgery of practicing medicine. To feel that good has been done to a suffering fellow-being, and to receive the grateful acknowledgments of those who have been relieved, affords a gratification which in a measure reconciles us to our lot, and must serve as an incentive to action to every soul of generous impulses. In looking forward to the work of the physician, the student should have a proper conception of the labor he has to undertake, and should prepare his mind for the trials which he may encounter, being sustained throughout, by the unconsciousness of devotion to the great object of curing his patients. With such impressions, a young man is not likely to neglect the privileges which are presented in his preparatory course of study, and while the office is exalted, it will impart an elevated tone to him who is to officiate. To know that much is expected, secures the best fruits in performance of any duty; and I would inculcate on medical students, the high destiny of the physician with the hope of stimulating them to come up to this standard in their acquisitions.

In setting out with our commissions as recruiting officers, we wish to add to the ranks such men as will cheerfully undergo the preparatory drill and fit themselves thoroughly for the service. We are aware that some calculate on dodging this ordeal, and by misleading the inspecting officers, slipping into line without their armour being duly girded on, but all such fail to go through the evolutions properly, and must of course, be frustrated when they come into action. As a good soldier presupposes training, so a good physician cannot be produced without careful attention to his duties as a student.

Systematic and continuous application will enable any one of ordinary mental capacity to attain to that knowledge of medical principles and facts which is requisite for procuring a diploma from our Colleges, and yet this is not the criterion by which I would have the student to measure his studies, but to direct his course so as to meet the higher claims of practice. This is the *experimentum crucis* by which attainments should be tested, and to be properly qualified for engaging in the treatment of the various diseases of mankind, should be the object of every student. To this end, the curriculum of the Medical Colleges contributes, most efficiently, if the pupil has previously received that instruction which fits him for appropriating its advantages; and it is for this purpose that I have here undertaken to urge a special attention to the preparatory study. The medical student should realize that he is a prospective Physician, and address himself to his work with exclusive reference to the exercise of this prerogative. To whom much is given, of him will much be required, and the lights of science have so enhanced the researches of the physical philosophy as to render it incumbent on those who are looking forward to the medical profession, to investigate those vital phenomena which have been recently developed, and thus prepare himself to bring forth things, both new and old, to guide him in the practical application of remedial measures to his patients.

Throughout the world, we find that eminence in society, is almost invariably connected with high attainments in letters and science. If we look through the annals of by-gone ages, or if we study the history of our own great men, it will result in the conviction, that they have exercised an influence upon the world, in proportion as their zeal was seconded by learning. A few giant minds, it is true, have become conspicuous, without undertaking that round of studies which usually elevate men to distinction. Nature though, has not been so gracious to many, and it has been remarked, that our eminent men are less celebrated for information, upon many branches of knowledge, than for their intimate acquaintance with a few, to which their attention had been exclusively devoted. Without concentration of the faculties of the mind, precious time may be frittered away in glancing from one treasure to another, and seizing upon none. If man were like the poetic bee, able to gather a sweet from every flower, then might we become eclectic indeed, trying all

things and holding fast to the good. But, alas! the brain will not retain the gathering of such labor, in the same manner that the wax-laid store-house accommodates the delicious extract of the flower. The fountain from which man draws, requires him to tarry, and give attention before he can drink the sweets of his achievements. Attention is the main element in attacking the abstruseness of any subject, and at the same time imparts increased strength and activity to the intellect. Study helps us to study; and when the habit of abstracting the thoughts from surrounding objects, and concentrating them upon what is desired, becomes established, the individual may go forward with confident hope of mastering whatever the mind of man can comprehend. Labor will secure all that is valuable in knowledge, and while application of the intellectual faculties invigorates the mind, it extends a benign influence throughout the body. The dizziness, lightness of head, impaired digestion, &c., which are so frequently complained of by students, results from sluggishness and strong diet rather than from mental application. All work and no recreation can never result advantageously, and bodily exercise should interrupt the intellectual labor, thus imparting a more healthy tone to body and mind.

These things are requisite, but while I would enjoin a proper application to those duties connected with the profession, it is not out of place to suggest, that high moral obligations rest upon those who are entering upon the study of medicine. Professional attainments should be associated with purity of character, and how lamentable is the picture of genius, perverted to base purposes! When we behold a powerful intellect led away from truth and uprightness, and giving its influence to error, we should remember that he alone is truly great who is endowed with that grandeur of thought which flows from a proper mental and moral culture.

To hold converse with the leading spirits of former ages, gives us delight. To know that all science is laid open to our view, and that we may enjoy the fruit of toilsome days and nights, is a consoling thought. To look for a time beyond our sphere, and watch with intelligent acumen, the revolutions of other worlds, knowing that our earth, which furnishes a play-ground for so many millions of beings, is but a unit in the gorgeous galaxy which makes up the universe, imparts a grand satisfaction. But yet more ennobling, and trans-

cendently sublime, is that elevation of our thoughts and feelings, which soars superior to the material, and entertains a beatific vision of the imperishable throne of our Creator. Eternal beauty and magnificence centre here, and the more refined the feelings, the more cultivated the intellect, so much the more highly are they appreciated and relished. Be not content, then, with grovelling after the things of earth, but direct your aspirations to that fountain of knowledge, which sends forth its stream, to conduct man to the greatest usefulness.

With such views, I would enjoin upon those who may feel the responsibility of their position, to deport themselves so as to indicate their true character. The day is past when any reproach can attach to the name of medical students, and, instead of the rowdyism which once was associated with a medical class, it is now observed that those bodies of young men, assembled in our large cities, to attend lectures, are characterized by the greatest decorum. It is a source of satisfaction to note this change, and to recognise in those who place themselves under our care, those elements which constitute the gentleman. We are pleased to know that a high sense of honor, in its noblest acceptation, of a regard for what is pure and true and just, characterizes our pupils, and it will be gratifying at all times, and under all circumstances, to witness a proper manifestation of self-respect on their part. Should we seem, at times, to be dictatorial, or exacting, rest assured that it results from no want of consideration for you, but with a sincere desire to urge you on in the work which has been undertaken, and we are happy to extend to you, on all occasions, a cordial greeting.

With such feelings, we welcome you now, and bid you God-speed in all that pertains to your duties.